

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF SOUTH CAROLINA  
BEAUFORT DIVISION**

Hunter J. Patenaude,	)	Civil Action No. 9:18-cv-3151-RMG
	)	
Plaintiff,	)	
	)	
v.	)	<b>ORDER AND OPINION</b>
	)	
Dick's Sporting Goods, Inc., and Shock	)	
Doctor, Inc.,	)	
	)	
Defendants.	)	
	)	

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This matter is before the Court on Defendants' Motion to Exclude Plaintiff's Expert John Lloyd, Ph.D., CPE (Dkt. No. 43). For the reasons set forth below, the Court denies the motion.

**I. Background**

This is a products liability case arising out an injury sustained by Plaintiff Hunter Patenaude when using a CORE Bioflex athletic cup manufactured by Defendant Shock Doctor, Inc. and sold by Defendant Dick's Sporting Goods, Inc. (Dkt. No. 1-1.) In brief, Plaintiff alleges that while wearing the Bioflex cup while playing lacrosse, Plaintiff was struck by a lacrosse ball on the bottom left side of the cup. (Dkt. No. 43-1 at 23.) Ultimately, it was determined that Plaintiff had a fractured left testicle, which was removed. (Dkt. No. 43-2.) Plaintiff brings products liability claims for strict liability, negligence and breach of warranty. (Dkt. No. 1-1.)

Defendants filed a motion for summary judgment. (Dkt. Nos. 53.) In conjunction with the summary judgment briefing, Defendants also moved to exclude Plaintiff's expert John Lloyd, Ph.D, CPE ("Dr. Lloyd"). (Dkt. No. 43.) Defendants argue generally that Dr. Lloyd's opinions are unreliable as his testing inaccurately approximated real-world conditions, failed to make a causal connection between his testing and Plaintiff's injury, and did not apply the "risk utility test"

applied by South Carolina to products liability cases. (*Id.*) Plaintiff opposes the motion, and Defendants filed a reply. (Dkt. Nos. 62, 64.)

## II. Legal Standard

Under Rules 104(a) and 702 of the Federal Rules of Evidence, “the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.” *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 589 (1993). Thus, even if a witness is “qualified as an expert by knowledge, skill, experience, training or education,” the trial court must ensure that (1) “the testimony is the product of reliable principles and methods,” that (2) “the expert has reliably applied the principles and methods to the facts of the case,” and (3) that the “testimony is based on sufficient facts or data.” Fed. R. Evid. 702(b) – (d). “This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid,” *Daubert*, 509 U.S. at 592 – 93, and whether the expert has “faithfully appl[ied] the methodology to facts,” *Roche v. Lincoln Prop. Co.*, 175 F. App’x 597, 602 (4th Cir. 2006).

Factors to be considered include “whether a theory or technique...can be (and has been) tested,” “whether the theory or technique has been subjected to peer review and publication,” the “known or potential rate of error,” the “existence and maintenance of standards controlling the technique’s operation,” and whether the theory or technique has garnered “general acceptance.” *Daubert*, 509 U.S. at 593 – 94. However, these factors are neither definitive nor exhaustive, *United States v. Fultz*, 591 F. App’x 226, 227 (4th Cir. 2015), *cert. denied*, 135 S. Ct. 2370 (2015), and “merely illustrate[] the types of factors that will bear on the inquiry.” *United States v. Hassan*, 742 F.3d 104, 130 (4th Cir. 2014). This is especially true as the *Daubert* standard applies to non-scientific expert testimony as well. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999).

### **III. Discussion**

Defendants do not dispute Dr. Lloyd's qualifications and it is clear from the Court's review that Dr. Lloyd is qualified to issue an opinion regarding the performance of the Bioflex cup, and other athletic cups, and assess whether they provide adequate protection from injury. (Dkt. No. 43-7.) Dr. Lloyd holds a Ph.D in ergonomics and biomechanics, has various relevant certifications and has worked in the field of ergonomics, biomechanics, human factors analysis and accident reconstruction for over thirty years. (Dkt. Nos. 43-7 at 15 – 16.) Dr. Lloyd is therefore clearly qualified to offer his opinions here. As Dr. Lloyd is qualified, the Court assess the content and reliability of his opinions.

Here, Dr. Lloyd assessed six different models of athletic cups.<sup>1</sup> (Dkt. No. 43-7 at 5.) For each athletic cup, Dr. Lloyd attached the cup to a male mannequin. (*Id.* at 6.) Eight feet away, Dr. Lloyd set up a BATA-2 baseball pitching machine, and shot baseballs at 70 miles per hour at the athletic cup. (*Id.* at 5 – 6.) Dr. Lloyd also set up a high-speed camera to capture the impacts. (*Id.*) Dr. Lloyd noted he used baseballs as the pitching machine would not accommodate lacrosse balls, though he noted that baseballs are identical in weight to lacrosse balls. (*Id.*) Dr. Lloyd stated he used 70 miles per hour based on an article noting that the speed is the average shooting speed of a high-school lacrosse player. (*Id.* at 6.) Each athletic cup was tested five times unless the cup “failed” during testing. (*Id.*) For each model of athletic cup, the report contains a variety of pictures of the cup, and then includes pictures of the impacts of the baseballs, with Dr. Lloyd noting whether there was “deformation.” (*Id.* at 7.) Notably, the CORE Bioflex cup at issue here compressed significantly when struck by a baseball. (*Id.*) Other athletic cups, such as the Shock

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<sup>1</sup> Dr. Lloyd assessed fifteen athletic cups in total but purchased multiples copies of certain models, including six of the CORE Bioflex cup at issue here. (Dkt. No. 43-7 at 5.)

Doctor Titan, Nutshellz Level 2 Armor and Martin athletic cup did not noticeably deform or have major damage to the cup. (*Id.* at 8 – 9, 12.) For the cups that did not deform or showed minimal damage, Dr. Lloyd concluded that they would “protect[] the male genitalia from injury.” (*Id.*) Therefore, based on these tests, Dr. Lloyd concluded to a “reasonable degree of scientific certainty” that the CORE Bioflex cup provided inadequate protection from injury from a “moderate speed ball,” and had Defendant Shock Doctor evaluated the CORE Bioflex cup in this manner it would have learned the product “provides inadequate protection against injury to the male genitalia” and that the CORE Bioflex cup should have been designed to “similar specifications” as other athletic cups which did not deform, including their own stainless-steel Titan cup. (*Id.* at 13.)

Defendants fault Dr. Lloyd for failing to include the “quantifiable information” regarding each athletic cup (eg, length, width, height), yet while this might be relevant information for cross-examination, it is not necessary where Dr. Lloyd’s report assessed, as described in his report and as is clear from reviewing the report, “performance of the various protective cups upon impact from a 70 mph baseball[.]” (Dkt. No. 43-7 at 6.)

Next, Defendants assert a variety of issues with the set-up of the testing. Namely, Defendants argue that Dr. Lloyd should not have used a baseball, that 70 miles per hour was an incorrect speed to use, that the baseballs struck the athletic cups in the center rather than on the side, that the report fails to include information regarding the mannequin, and that the athletic cups were affixed by an elastic band rather than in compression shorts. (Dkt. No. 43 at 10 – 12.) Defendants cite to no case-law to support these grounds for exclusion, and instead rely almost entirely on the report of their own expert, Dr. Scotty G. Piland, Ph.D, a seven-page report without independent testing, that Dr. Lloyd set up his tests incorrectly and came to incorrect conclusions.

(*Id.*; Dkt. No. 64 at 4 – 9.) The Court will not weigh the evidence between two sparring experts, and instead these disagreements may be addressed through testimony and cross-examination and must be resolved by a fact-finder, not the Court on summary judgment.<sup>2</sup> More fundamentally, each of these arguments goes to the factual basis of the report, namely, whether the testing was structured in such a way to reasonably assess the athletic cup at issue here, and it is well settled that the factual basis for an expert opinion generally goes to weight, not admissibility. *Synergetics, Inc. v. Hurst*, 477 F.3d 949, 955 (8th Cir. 2007) (“As a general rule, the factual basis of an expert opinion goes to the credibility of the testimony, not the admissibility, and it is up to the opposing party to examine the factual basis for the opinion in cross-examination.”) (citations omitted). Defendants can address the use of baseballs, the mannequin, the direction of the ball and the way the athletic cups were attached on cross-examination, yet none of these arguments render Dr. Lloyd’s opinion unreliable so as to be inadmissible.

Defendants next argue that Dr. Lloyd failed to draw a “causal connection” between his testing and the injury suffered by Plaintiff. (Dkt. No. 43 at 12.) Defendants seemingly expand this argument in their Reply, noting that Dr. Lloyd did not “quantify anything that was actually

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<sup>2</sup> Additionally, it is clear that certain of the alleged deficiencies are not mis-stated facts, but rather are different reasonable conclusions based on the same underlying facts. Notably, Defendants take issue with the use of 70 miles per hour, and up to three mile per hour upward departures to that speed in certain shots. (Dkt. No. 43 at 10 – 11; 64 at 9.) However, the study at issue, “Shooting motion in high school, collegiate and professional men’s lacrosse players,” (Dkt. No. 52-1) lists the “averaged data” for high school students shooting with their dominant hands. (*Id.* at 4, 14.). The data shows the average shooting speed as 112 km/h, or 69.6 mph, with a standard deviation of +/- 16 km/h, or 9.9 mph. (*Id.*) Defendants’ characterization of Dr. Lloyd’s use of a 70 mph as “extreme,” rather than “moderate” as described in the report, therefore demonstrates the impropriety of excluding Dr. Lloyd. The Court cannot determine as a matter of law that the use of 70 mph renders the report unreliable when a peer-reviewed study determined that 69.6 mph was the average speed of a high-school student’s lacrosse shot. An average likely cannot be described as “extreme,” and is reasonably described as “moderate.” While the study notes that a shot indoors is not “identical” to shooting outdoors, this is an issue of weight appropriate for cross-examination, not a *Daubert* motion.

happening to the...mannequin" and therefore did not conduct a "biomechanical analysis" to assess the "causal claim." (Dkt. No. 64 at 2 – 4.) Again, Defendants have identified no cases indicating that quantification is required in order for a human factors or ergonomic expert to testify regarding causation, and instead his report contains close-up photographs of the CORE Bioflex athletic cup significantly compressing when struck by a baseball. (Dkt. No. 43-7.) Indeed, contrary to Defendants' position, Dr. Lloyd does opine regarding a causal connection, relying on the clear photographs to conclude that the compression "would result in transfer of the impact energy to the male genitalia, with injury-producing consequences." (*Id.* at 8.) These photographs and Dr. Lloyd's conclusion based on the photographs provide sufficient information for Dr. Lloyd to testify regarding causation and to the extent Defendants dispute the factual basis of Dr. Lloyd's opinion, they may address the issue on cross-examination.

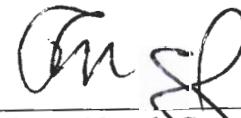
Finally, Defendants argue that Dr. Lloyd's report and testimony must be excluded as he fails to present evidence to support the risk-utility test, as required under South Carolina law to demonstrate a design defect. (Dkt. No. 43 at 13.) Specifically, Defendants argue that Dr. Lloyd was required to produce evidence of a reasonable alternative design, as required to demonstrate a design defect under South Carolina law. *See Branham v. Ford Motor Co.*, 390 S.C. 203, 225, 701 S.E.2d 5, 16 (2010) ("In sum, in a product liability design defect action, the plaintiff must present evidence of a reasonable alternative design. The plaintiff will be required to point to a design flaw in the product and show how his alternative design would have prevented the product from being unreasonably dangerous."). Defendants contend this would have required Dr. Lloyd to include evidence considering the "costs, safety and functionality associated with the alternative design." *Id.* However, Defendants misstate who this burden of proof applies to: it is a *plaintiff's* burden to present evidence of an alternative design *not* the *expert's*. While expert testimony, from some

source, may be required to present evidence of an alternative design, the failure to include evidence of “costs, safety and functionality” in any given expert’s report is not a basis for excluding that specific expert. Regardless, Dr. Lloyd’s report did contain evidence of an alternative design. First, Dr. Lloyd’s report contained, generally, the market costs of each of the tested athletic cups. (Dkt. No. 43-7 at 5.) Second, Dr. Lloyd tested the safety and functionality of three other athletic cups that would have allegedly prevented the injury at issue here, including one produced by Defendant Shock Doctor. (*Id.*) This evidence, of alternative designs actually implemented in other products, meets the test of *Branham*, and presents a fact-finder with evidence of the market costs, safety and functionality of alternative, and actually used, designs. *See Riley v. Ford Motor Co.*, 408 S.C. 1, 7, 757 S.E.2d 422, 425 (Ct. App. 2014), *rev’d on other grounds*, 414 S.C. 185, 777 S.E.2d 824 (2015) (“We find the Estate met the requirements of *Branham* by presenting evidence of Ford’s own alternative design for a door-latch system, which Ford used in F-150 trucks manufactured before Riley’s 1998 model, and which Ford originally incorporated into the design of the 1998 model.”); *Wickersham v. Ford Motor Co.*, 194 F. Supp. 3d 434, 439 (D.S.C. 2016) (“The fact that other manufacturers successfully implemented the raised threshold approach provides more than a reasonable basis for concluding that Ford could have done the same here.”). Therefore, Dr. Lloyd has properly presented evidence to support the risk-utility test.

#### **IV. Conclusion**

For the foregoing reasons, Defendants Motion to Exclude John Lloyd (Dkt. No. 43) is **DENIED**.

**AND IT IS SO ORDERED.**



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Richard Mark Sengel  
United States District Court Judge

October 18, 2019  
Charleston, South Carolina